

short term storage of the state of a particular service. In the preferred mode of the present invention, the objects stored in repository 80 are typically very similar to mapper runs as described above. For a more detailed description of mapper runs, Classic MAPPER User Manual is available from Unisys Corporation and incorporated herein by reference. In the more
5 general case, repository 80 would typically store predefined sequences of statements in the command language of the enterprise data base management system(s) to be accessed.

Cool ICE engine 76 sequences these previously stored command statements and uses them to communicate via intranet 84 with the data base management system(s) (e.g., Classic Mapper) resident on enterprise server 86 and departmental server 88. The short term storage
10 capability of repository 80 is utilized by Cool ICE engine 76 to store the state and intermediate products of each service until the processing sequence has been completed. Following completion, Cool ICE engine 76 retrieves the intermediate products from repository 80 and formats the output response to the client, which is transferred to internet terminal 54 via web server 68 and world wide web path 66.

Cool ICE Administrator 82 is available for coordination of the operation of Cool ICE
15 system 62 and thus can resolve conflicts, set run-time priorities, deal with security issues, and serve as a developmental resource. Graphing engine 78 is available to efficiently provide graphical representations of data to be a part of the response of a service. This tends to be a particularly useful utility, because many of the existing data base management systems have
20 relatively sparse resources for graphical presentation of data.

Fig. 6 is a schematic diagram 116 showing the processing of a service request by the Cool ICE system. Screen 118 is the view as seen by the client or user at an internet terminal (see also Fig. 4). This screen is produced by the commercially available browser 120 selected by the user. Any such industry standard browser is suitable, if it has the capability to handle frames.

5 The language of screen 118 is HTML 124. Hyperlinks 126 is used in locating the URL of the Cool ICE resident server. In many instances, this will simply be the internet access provider of the internet terminal, as when the internet terminal is owned by the enterprise and the user is an employee. However, when the user is not an employee and the internet terminal is not necessarily owned by the enterprise, it becomes more likely that hyperlinks 126 identifies a
10 remotely located server.

Icon 122 is a means of expressly identifying a particular service request. Such use of an icon is deemed to be unique. Window area 128 provides for the entry of any necessary or helpful input parameters. Not shown are possible prompts for entry of this data, which may be defined at the time of service request development. Submit button provides the user with a convenient
15 means to transmit the service request to the web server in which the Cool ICE system is resident.

Upon "clicking on" submit button 130, screen 118 is transmitted to web server 136 via world wide web path 132. As discussed above, world wide web path 132 may be a telephonic dial-up of web server 136 or it might be a long and complex path along the internet if web server 136 is remote from the originating internet terminal. Web server 136 is the software which

Fig. 10 is a detailed diagram 300 showing spooling of an automatically generated report.

The report in the present example is generated based upon the date. When the preset date is reached, Cool ICE administration 328 accesses the appropriate object for generation of the report from repository 330 via path 326. The object is transferred to Cool ICE administration 328 via path 324. Cool ICE administration 328 determines that the report is to be converted to HTML display pages and spooled on repository 322 for future electronic distribution over the world wide web. The object is transferred to Cool ICE service handler 320 via path 318 for execution with the notification that the resultant report is to be converted to HTML display pages and spooled for future delivery.

Cool ICE service handler 320 generates the report, converts the report to HTML display pages, and transfers the output to repository 322 via path 316 for spooling and future electronic delivery.